



FORT PECK RESERVOIR DRAINAGE

PHYSICAL DESCRIPTION

Fort Peck Reservoir is formed by a large earth-filled dam located on the Missouri River in the northeastern part of Montana. Completed in 1937, it is the largest body of water in the state, with 246,000 surface acres and 1,520 miles of shoreline at full pool. The reservoir is 134 miles in length and has a maximum depth of 220 feet when full. Major tributaries to Fort Peck Reservoir include the Missouri River, the Musselshell River, and Big Dry Creek. The Musselshell and Missouri rivers are discussed in their own drainage plans. The habitat at the mouths of these streams is closely tied to Fort Peck Reservoir levels; several stream miles are inundated at normal to high pool levels. This watershed encompasses a drainage basin of 57,500 square mile basin and is located within Phillips, Valley, Fergus, Petroleum, Garfield, and McCone counties. Administration of all land and water within the executive boundary of the Charles M. Russell (CMR) National Wildlife Refuge is shared by the U.S. Fish & Wildlife Service and the U.S. Army Corps of Engineers (USACE) in accordance with a Memorandum of Agreement. The reservoir is operated by the Corp of Engineers to provide water for power, flood control, irrigation, navigation and recreation.

FISHERIES MANAGEMENT

The fishery in Fort Peck Reservoir is diverse with 47 different fish species, most of which are native to the Missouri River. Sixteen species, mostly game fish, have been introduced by FWP to develop sport-fishing opportunities. Walleyes and northern pike were both introduced in 1951 followed by lake trout in the mid 1950's. Smallmouth bass were introduced in 1981 and chinook salmon in 1983. During the 1980's spottail shiners and cisco were also introduced to supplement the existing forage base. Additionally, native game fish including burbot, channel catfish, paddlefish, and sauger are sought by anglers throughout the reservoir. Because of the diversity and world class fishery that Fort Peck Reservoir has to offer, it is ranked number one in the region in number of angler days, and within the top ten on a statewide level.

The quality multi-species fishery found in the reservoir is the result of ongoing management efforts by FWP. Key to this effort is an understanding of the variable nature of fish populations. Specifically, natural reproduction is largely influenced by reservoir water levels and environmental conditions at time of spawn. As a result, extensive stocking programs for walleye and chinook salmon are in place to reduce population variability. These introductions were carefully analyzed to determine the long-term benefits to the fishery. Evaluation of management success is done through standardized monitoring combined with angler surveys. This basic monitoring program allows estimates of catch rates, size of fish, and overall angler satisfaction .

HABITAT

Fort Peck Reservoir, much like other storage reservoirs, typically has annual varial zones where annual water level fluctuations produce a suite of impacts to the aquatic environment and associated terrestrial environment. This unstable zone is subject to loss of aquatic and terrestrial plants and associated populations of phytoplankton and benthic organisms. Lack of submerged vegetation causes a decline in the overall productivity of the entire fish population by reducing

food supply, spawning habitat, and rearing cover. Submerged vegetation also provides protective cover for forage fish and young game fish species. Additionally, varial zones may provide areas for successful colonization of aquatic invasive species such as Eurasian Watermilfoil, a submerged aquatic weed discovered in 2010, because there is no healthy native aquatic plant community to provide competition.

During the late 1950's and early 1960's rising water levels on Fort Peck Reservoir inundated vegetation and produced an outstanding fishery for northern pike, crappie, and yellow perch. In addition, walleye abundance improved after increases in reservoir elevation and high flows in the Big Dry Arm during the late 1970's. Higher reservoir elevations and increased flows allowed adult walleye to access suitable spawning substrate in the Big Dry Arm. Water level management to promote successful walleye spawning was not possible. . As a result, this high quality fishery was maintained with stocking. Recommendations from FWP to enhance and maintain the Fort Peck fishery are submitted annually to the USACE for inclusion into the Annual Operating Plan process. Montana requests are coordinated with other Missouri River states through the Missouri River Natural Resource Committee.

Attempts by local sportsman groups to improve spawning habitat to enhance the fishery have been undertaken in the form of spawning fences and Christmas tree reefs. However, due to the vastness of the reservoir, no measurable benefits to the fishery have been noted. Cobble or rock spawning reefs have been considered to aid natural reproduction of walleye, but cost is prohibitive and long-term effectiveness is uncertain due to siltation and water level fluctuations.

FISHING ACCESS

Fort Peck Reservoir is surrounded by public access within the CMR National Wildlife Refuge. However, due to the size of the reservoir and poor condition of roads/trails, access opportunities are somewhat limited. A total of 13 public access sites (12 boat ramps) are located around the reservoir, which are administered by USACE. These recreation sites are managed privately or by federal government natural resource agencies. Specific recreation sites managed by FWP include Duck Creek FAS near Fort Peck, Rock Creek FAS on the Big Dry Arm of the reservoir, and Hell Creek Recreation Area north of Jordan, which is managed by the FWP Parks Division. Various projects have been implemented over the years to improve access to Fort Peck Reservoir through the joint efforts of five counties, federal agencies, and FWP. Various local, state and federal funds were used to accomplish this work. The projects included work on access roads and boat ramp facilities at the Duck Creek FAS, Pines recreation area, Hell Creek, Crooked Creek, Flat Lake/Spillway, and Nelson Creek Recreation areas. Efforts by six surrounding counties, US Fish and Wildlife Service, USACE, BLM, and FWP resulted in additional improvements on access routes to Hell Creek, Crooked Creek, McGuire Creek, the Pines, and Fourchette Bay.

SPECIAL MANAGEMENT ISSUES

The 2012-2022 Fort Peck Reservoir Fisheries Management Plan was completed in December of 2011. The Plan reflects the public's desire for a high quality, cost effective, multi-species fishery in Fort Peck Reservoir. Additionally, this plan represents the on-going evolution of fisheries management on Fort Peck Reservoir. Of principal importance is to efficiently develop scientifically sound sampling methods that quantify the essential metrics needed to gain additional insight into the Fort Peck Reservoir fishery. The following is a synopsis of the plan.

Walleye Stocking

FWP will aim to stock a minimum of 3.0 million walleye fingerlings annually in Fort Peck Reservoir. Fingerling stocking will be augmented with fry as conditions and availability allow.

Walleye fingerling production at the hatcheries will depend on quality and quantity of eggs collected, egg hatching success and pond production. If fingerling production exceeds 3 million, biological and environmental conditions (listed below) will be reviewed to determine if stocking additional walleyes is justified. Stocking rates may be reduced if biological and environmental conditions are unfavorable to maintaining a high quality walleye fishery. Continue to evaluate walleye fingerling and fry survival and recruitment. Walleye stocking rates will be guided by reservoir water levels, physical condition of the existing walleye population, and forage fish abundance. The goal of this plan is to maximize hatchery production of walleye to ensure that biologically based stocking rates are met.

Walleye Catch Rates

FWP will work to achieve angler catch rates of 0.4 walleye per hour during periods of the summer creel on Fort Peck Reservoir. The highest documented angler catch rate for walleye on Fort Peck Reservoir occurred in 2008, with 0.28 fish per hour. The goal of 0.4 fish per hour will likely not occur throughout the reservoir but seasonally in regions of the reservoir. For example, walleye catch rates of 0.5 fish per hour were observed in July during the 2008 Fort Peck creel survey. Walleye fisheries in surrounding states and provinces throughout the Midwest, which have limited natural reproduction, like Fort Peck, consistently have lower catch rates. Walleye catch rates exceeding 0.3 fish per hour are generally considered excellent. The goal of this plan is to maximize walleye angler catch rates while ensuring a sustainable walleye fishery.

Tournaments

Angling tournaments continue to grow in popularity on Fort Peck Reservoir. In 2001, the first year of the previous Fort Peck fisheries management plan, three walleye tournaments and one smallmouth bass tournament were permitted. In 2011, 13 tournaments were proposed consisting of eight walleye, three smallmouth bass, one northern pike, and one salmon/lake trout tournament. The increase in proposed tournaments in 2011 on Fort Peck Reservoir led to the denial of one tournament entry because management plan stipulations under the old plan stated that no more than 12 open water tournaments will be held per year. The management plan further stated that preference will be given to applicants who held previous tournaments on Fort Peck Reservoir. This structure has led to inequality for non-established tournaments because established tournaments occupy the 12 available slots.

Because of the increasing number of tournaments and scheduling conflicts with holiday weekends on Fort Peck Reservoir, the 2011 open water season had a tournament scheduled every weekend during the months of June and July minus the holiday weekends. Non-tournament anglers have expressed frustration with the lack of tournament-free weekends during peak summer months and state that impacts associated with tournament pre-fishing needs to be

addressed. The goal of the current plan is to reduce conflict between non-tournament anglers while ensuring the tradition of tournament fishing continues. The following list of criteria will be used to meet this goal.

Fort Peck Reservoir Management Plan Tournament Guidelines

1. A maximum of 16 tournaments will be permitted per calendar year.
 - a. No more than 12 open water and 4 ice tournament will be permitted per calendar year.
 - b. No more than 6 tournaments will be permitted from June 1st through July 30th.
 - c. No tournaments will be permitted for the weekends of Memorial Day, Father's Day, Fourth of July, or Labor Day.
 - d. Only one tournament per weekend will be permitted.
 - e. Established Fort Peck tournaments of 10 consecutive years or more will be given preference.
 - f. Applicants will be required to list first, second and third choice tournament dates on applications.
 - g. In years where more applications are received than available tournament dates, applications will be entered in a lottery.
 - h. Unsuccessful applicants will receive one bonus point. Tournament applications will be entered into the lottery in subsequent years and bonus points will be applied (e.g. if an applicant has accumulated one bonus point, that application will be entered into the lottery two times).
2. Tournaments will be reviewed on an individual basis. Evaluation of proposed tournaments will include potential biological and social impacts. Proposed tournaments will undergo a 30-day public review and comment period.
3. All catch and release tournaments with weigh-in type format will be limited to cool weather periods: May-June 15, or after September 15.
4. Tournament boundaries must be clearly defined in the application. Proposed boundary size should be minimized in an effort to reduce tournament related fish mortality caused by fish being held in live-wells for extended periods of time and/or traveling long distances.

Tournament directors will be required to report post-tournament catch-rate information in a standardized format.

FISHERIES MANAGEMENT DIRECTION FOR FORT PECK RESERVOIR DISTRICT

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Fort Peck Reservoir (Headwaters Downstream to Fort Peck Dam)	246,000 acres	Walleye	Hatchery/ Wild	General	Continue to place the primary management emphasis on walleye. Adhere to stocking guidelines of the Fort Peck Reservoir Fisheries Management Plan.
		Northern pike, Smallmouth bass	Wild	General	Continue to monitor populations. Rely on variable natural reproduction and survival to determine population levels.
		Lake trout	Wild	General	Rely on variable natural reproduction and survival to determine population abundance. Evaluate stocking lake trout if conditions warrant. Monitor populations through annual surveys.
		Chinook salmon	Hatchery	Put-Grow-Take	Adhere to stocking guidelines of the Fort Peck Reservoir Fisheries Management Plan. Monitor populations through annual surveys.
		Burbot, Channel catfish Sauger	Wild	General/ Special Regulations	Continue to monitor populations. Better understand factors for limited recruitment.
Sentinel Reservoir	14 acres	Rainbow trout	Hatchery	Put-Grow-Take	Manage for put grow and take rainbow trout fishery.
Habitat needs and activities: Look for opportunities to increase riparian habitat and aesthetic values.					
Big Dry Creek/ Little Dry Creek	149 miles 69 miles	Channel catfish	Wild	General	Continue to monitor populations.
		Multi-species	Wild	General/Conservation	Manage for recreational fishing opportunity where applicable. Monitor non-game fish species for native fish assemblage and overall ecosystem health

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Trout Ponds North of Reservoir- Located Throughout Blaine, Phillips, and Valley Counties	Numerous	Rainbow trout, Brook trout	Hatchery	Put-Grow-Take	Monitor water conditions and impacts from winterkill. Stock trout based on current 6-year stocking plan.
Habitat needs and activities: Work with Bureau of Land Management and landowners to increase riparian habitats and aesthetic landscapes surrounding the ponds. Maintain windmill aeration systems on ponds with marginal depths.					
Warmwater Reservoirs and Ponds North of Reservoir- Located Throughout Blaine, Phillips, and Valley Counties	Numerous	Largemouth bass, Northern pike, Walleye, Smallmouth bass, Channel catfish Black crappie, Yellow perch, Bluegill	Wild/ Hatchery	General/ Put-Grow- Take	Manage as self-sustaining fisheries. Supplement populations with hatchery stocking and wild fish transfers as needed. Monitor water conditions and impacts from winterkill.
Habitat needs and activities: Work with Bureau of Land Management and landowners to increase riparian habitats and aesthetic landscapes surrounding the ponds. Maintain windmill aeration systems on ponds with marginal depths.					
Private Ponds/Reservoirs South of Reservoir in FWP Region 7 Pond Program	Numerous	Trout	Hatchery	Put-Take	Public relations opportunity with landowners to provide local fishing opportunity for rural community. Maintain fishery through regulations and annual stocking
		Bass, Walleye, Northern pike	Wild/ Hatchery	General/Put-Grow- Take	Public relations opportunity with landowners to provide local fishing opportunity for rural community. Maintain fishery through regulations and stocking when necessary
		Crappie, Yellow perch, Bluegill	Wild/ Transfer	General	Public relations opportunity with landowners to provide local fishing opportunity for rural community. Provide panfish angling opportunity, supplement population through wild fish transfers when necessary.